

Research Facilities and Equipment Sharing



<http://www.equipment.admin.cam.ac.uk/>

What does Equipment Sharing mean to me?

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Research Facilities and Equipment Sharing



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What are the benefits?

Helps researchers find equipment and facilities available for sharing

Encourages internal, national, and international collaboration

Increases the exposure of facilities that can be used to recover some equipment costs

Highlights a commitment to share equipment - beneficial when grant applications are under consideration


Helps toward waste reduction, reduced consumption, recycling, and carbon profiling

Research Facilities and Equipment Sharing

- Based on University's Asset Register
- Items of Equipment and Facilities worth more than £10,000
- Items younger than 2006 (larger legacy items an exception)

Research facilities and equipment at Cambridge

Home Search Frequently asked questions Costing equipment and facilities Fixed assets guidance Contact Admin access



Welcome

This is the University of Cambridge research facilities and equipment searchable database.

The database has been created to:

- Help researchers search for equipment and facilities available for sharing
- Encourage internal, national, and international collaboration
- Support efficient use of equipment and facilities
- Increase the exposure of facilities used to recover equipment maintenance costs
- Highlight the commitment to share equipment that may also be beneficial when future grant applications are considered

As well as searching for University of Cambridge equipment and facilities, the database also holds details from our partner Universities (Imperial, Oxford, Southampton, UCL) on selected facilities that they have available to share.

From August 2014, our data has also been uploaded onto the [National Equipment Sharing Portal](#) which contains contributions from over 20 Universities in the United Kingdom.

Search for research facilities and equipment

Search for

Photoluminescence Mapped

Type

Facilities

Department

Any

Category

Any

Order by

Name

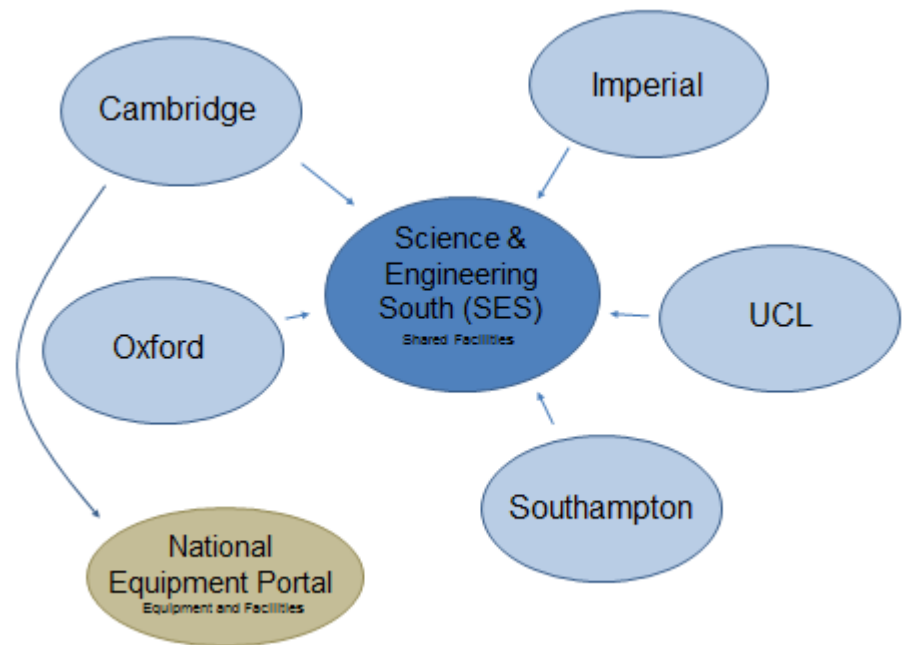
Search

Access to over 2500 items of Equipment and 58 Small Research Facilities



Research Facilities and Equipment Sharing

- **Funder Requirement to show commitment to Equipment Sharing in funding applications above £134,011 (inc VAT)**
- **Reports available at Individual PI, Departmental, and University level**
- **Grant Application Guidance and Advice**
- **Guidance on Equipment Disposal**
- **Science and Engineering South (SES)**
 - Cambridge, Oxford, Imperial, UCL and Southampton
- **70% of Cambridge records exported to the National Equipment Portal**
- **Cross-fertilisation of ideas**
- **Fosters Collaboration**



Research Facilities and Equipment Sharing

The National Equipment Portal:

- Publicly accessible and viewable
- Developed by colleagues at Southampton
- Supported by 43 institutions
- Over 11,300 items

<http://equipment.data.ac.uk/>

The screenshot shows the homepage of the **equipment.data** portal. At the top, there's a navigation bar with links for Compliance, Status, FAQ, and Uniquip, along with social media icons for Twitter and Facebook. Below this is a search bar with the placeholder text "Search for equipment:" and a search button. The main content area features a large blue banner with the heading "It's good to share!" and a welcome message: "Welcome to equipment.data, your one stop shop for accessing UK wide HE research equipment. Use this searchable database to locate a piece of equipment or facility within your own or at another institution. equipment.data could be your starting point for some valuable collaborations." To the right of the text is an illustration of two people connected by a globe. Below the banner, there's a section titled "About this site" explaining the project's funding by EPSRC and its goal to improve research equipment sharing. Another section, "Adding your research equipment data", provides instructions for users to contribute their data. On the right side, there are two sidebar widgets: "Our Newsletter" with a subscribe link and "Tweets" showing recent tweets from @equipmentdata.

equipment.data
Enabling access to UK HE research equipment

Search for equipment: e.g. Microscope

It's good to share!

Welcome to equipment.data, your one stop shop for accessing UK wide HE research equipment. Use this searchable database to locate a piece of equipment or facility within your own or at another institution. equipment.data could be your starting point for some valuable collaborations.

Start searching now, simply enter the name, or part name, of the equipment or facility you are searching for in the box at the top of the page, select from the drop down list then make contact.

About this site

The development of equipment.data is funded by EPSRC in response to the need to improve visibility and utilisation of UK research equipment. This relatively simple technology enables searching across all published UK research equipment databases through one aggregation "portal", allowing greater accessibility with the aim to improve efficiency and stimulate greater collaboration in the sector. The technology behind this development has been a partnership between a number of UK universities, primarily outcomes of the UNIQUIP Project. The development has the backing of RCUK as its preferred medium for national equipment data sharing offering a scalable solution, without the need for complex software systems.

Adding your research equipment data

Adding your institution's research equipment data is easier than you may think, see the Frequently Asked Questions page. The project team can provide technical support and guidance regarding the requirements for publishing your equipment dataset. Please use the contact form in the first instance.

A "status" function is included in the header to this page which provides a list of contributors and allows you to check the quality of your data upload, detailing any issues encountered on the last ingestion. You can also download normalised RDF, CSV and TSV data per organisation, and obtain links to the source dataset.

Our Newsletter
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equipment.data.ac.uk 6 Aug
@equipmentdata
Well done to @Unioffreading who are now fully #autodiscoverable and contributing to #EDacuk bit.ly/255K6 #opendata Expand

equipment.data.ac.uk 30 Jul
@equipmentdata
Latest newsletter is out bit.ly/2J7mB8K Not yet a subscriber? Visit bit.ly/2J7mB8K
Tweet to @equipmentdata


Research Facilities and Equipment Sharing

How do I engage locally?

- Access to 2500 items within Cambridge
 - Access to 58 Facilities within Cambridge
 - Access to 237 Facilities within SES
-
- Access via Raven
 - Type in Equipment name
 - Select Equipment or Facility
 - Search

Research facilities and equipment at Cambridge

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From August 2014, our data has also been uploaded onto the [National Equipment Sharing Portal](#) which contains contributions from over 30 Universities in the United Kingdom.

Search for research facilities and equipment

Search for

Photoluminescence Mapper

Type

Facilities

Category

Any

Department

Any

Order by

Name

Search >

<http://www.equipment.admin.cam.ac.uk/>

Research Facilities and Equipment Sharing

How do I engage locally?

- **Over 90% of records contain:**
 - full description
 - up-to-date contact details
 - image of the equipment for reference
 - Department and School details (and links)
 - Indication of current usage level
- **Liaise directly with the primary contact**

UNIVERSITY OF CAMBRIDGE Study at Cambridge About the University Research at Cambridge Quick links Search


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Accent RMP 2000 Photoluminescence Mapper

The equipment enables the light emitted from semiconductor quantum well structures to be mapped. The light from the structure is excited using a laser within the Mapper. Wafers up to 6" in diameter can be studied.

Photoluminescence Mapping at MSM: The Photoluminescence (PL) mapping system (Accent RMP 2000 series) purchased in 2006 using SRIF funds has shown to be a tremendous asset for the characterisation wide-bandgap semiconducting materials. This state-of-the-art equipment addresses past under-investment and helps to accelerate improvements in material quality and device performances. Material characterisation plays a crucial role in the departmental research and photoluminescence mapping studies can reveal much about epitaxial structures and their on-wafer uniformity before expensive device processing steps are carried out. The RMP 2000 equipped with a 266nm Q-switch excitation source permits the compositional mapping of materials such as GaN and its alloys with AlN and InN over a broad composition range. The equipment also makes it possible to determine the thickness of the thin semiconductor films evaporated on a foreign substrate. Examples of such detailed compositional and thickness maps of two-inch wafers are shown in the figure below. Each map of a 2-inch wafer is obtained in less than 10 minutes, allowing rapid feedback to the crystal growers. The wafer holder allows mapping of wafers up to 6-inch in diameter. The high power density of the Q-switched laser of the PL mapper is extremely useful to give an accurate prediction of the optical properties of a fully developed UV/blue/green light-emitting diode (LED) devices, potentially saving many expensive hours in clean-room facilities. The RMP 2000 PL mapper has proven to be crucial for the research of the Cambridge Centre for Gallium Nitride (Colin Humphreys, Rachel Oliver) but also for the Device Materials Group (Zoe Barber, Judith Orscoli) and the Electronic Devices and Materials Group (Bill Milne) with research efforts in ZnO and Fe2O3 nanowires, respectively. In these particular cases, the crystal growers use the PL mapper to assess the materials' quality and hence to determine their optimum growth conditions. The GaN group is a partner of the EPSRC National Centre for III-V technologies. A link to the website of the III-V centre is posted below. Please liaise with primary contact to discuss and arrange access.



Details

University
University of Cambridge

School
School of the Physical Sciences

Department
Materials Science & Metallurgy

Location
M036_ANNEXE 118

Category
Semiconductor Device Analyzer

Utilisation level
● Medium (40% to 60%)

URL
<http://www.gan.msm.cam.ac.uk/>

Contacts

Name	Email	Tel.
KAPPERS, Dr M	mjk30@cam.ac.uk	01223 762958

<http://www.equipment.admin.cam.ac.uk/>

Research Facilities and Equipment Sharing

How do I engage nationally?

- **Records contain:**
 - full description
 - up-to-date contact details
 - image of the equipment for reference
- **Liaise directly with the primary contact**

The screenshot displays the 'equipment.data' website interface. At the top, the site's name 'equipment.data' is prominent, followed by the tagline 'Enabling access to UK HE research equipment'. Navigation links for 'Compliance', 'Status', 'FAQ', and 'Uniquip' are visible. A search bar contains the text 'Accent RMP', and a dropdown menu shows 'Sort by distance from: UNIVERSITY OF CAMBRIDGE' with a green checkmark and 'Units: km'. Below the search bar, a result box indicates '1 matches.' and lists 'Accent RMP 2000 Photoluminescence Mapper' from the 'University of Cambridge - 0 km'. A 'Start page, search' button is also present.

The second part of the screenshot shows the detailed page for the 'Accent RMP 2000 Photoluminescence Mapper'. The page header includes the site name and navigation links. The title 'Accent RMP 2000 Photoluminescence Mapper' is displayed. Below the title, there is a 'More information.' section. The main text describes the equipment's capabilities, mentioning its use in semiconductor research and its role in characterizing materials. It also includes contact information for Dr M. Kappers, with an email address 'mjk30@cam.ac.uk' and a phone number '+441223762958'. A feedback box at the bottom encourages users to provide input on their search experience.

<http://equipment.data.ac.uk/>

Research Facilities and Equipment Sharing

Further Information

- Departmental outreach
- University websites and publications
- Email communications
- Annual Post-Doctoral Inductions
- Regular Twitter activity via Open Data account: #RFES
- Local and National Events
 - Sustainable Labs at Cambridge
 - National Sustainable Labs Conference



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To book an Induction Session

Individually, as a Research Group, or as a Department

Please get in touch!

Christopher.R.Wilkinson@admin.cam.ac.uk